# THE BOUGAINVILLE REBELLION, THE MINING INDUSTRY AND THE PROCESS OF SOCIAL DISINTEGRATION IN PAPUA NEW GUINEA

# Colin Filer

On 25 November 1988 militant landowners under the leadership of Francis Ona embarked on a campaign of sabotage against the installations of the Panguna copper mine, operated by Bougainville Copper Limited (BCL) in the North Solomons Province of Papua New Guinea. In March 1989, the Papua New Guinea government despatched troops to the province in a vain effort to subdue the militants. The frequency of armed clashes between the militants and the security forces increased to the point at which a protest against the mining company had become an act of rebellion against the authority of the state. On 15 May BCL ceased its mining operations amidst a fresh outburst of attacks on its property and the threat of a strike by workers fearful for their own safety. Despite the efforts of various state, church and community organizations to negotiate a peaceful solution to the crisis, the violence has continued, the mine has remained shut, and Papua New Guineans are learning to live with the consequences. As 1989 moved to a close, the rebels showed no sign of abandoning their demands for removal of the security forces, Bougainvillean secession from Papua New Guinea, and an astronomical payment of ten billion kina as compensation for environmental damage caused by past mining operations. The new year had hardly begun when the national government announced an all-out effort to crush the rebellion, but within a matter of weeks all government forces had been withdrawn from the province under the pretext of a 'ceasefire' which looked more like a concession of defeat.

The forced closure of the Panguna mine and the virtual secession of the North Solomons has been by far the most serious political and economic crisis in the fourteen years of Papua New Guinea's independence.

This paper deals with one particular aspect of the Bougainville rebellion, the social aspect, and especially with its *social origins*, which are at risk of being lost to view beneath a spreading cloud of agonizing rhetoric. It also addresses the question of whether and how this sort of crisis might recur in relationships between local communities and mining companies in respect of those other major projects (Ok Tedi, Porgera, Lihir, et cetera) which are now expected to make an even greater contribution to the national economy, and government revenues. I suggest that the social origins of the Bougainville rebellion do not warrant the optimism displayed by the mining industry on this score.

#### SPECIAL EVENTS AND GENERAL TENDENCIES

It is widely believed, both inside and outside the mining industry, that the Bougainville crisis is a unique phenomenon whose origins are to be found in the political relationship between the copper mining project and emergent nationalist/secessionist sentiment on Bougainville in the late colonial period. It is recognized that 'landowner strikes' against all sorts of capital, not just mining capital, have become a national institution since independence, that they are often, if not always, violent, and that the state does not possess the will or the capacity to seriously limit their occurrence. But when they do occur, they normally run out of steam within a week or so, contained by the appearance of a politican or a riot squad, a social worker or a man of God. When the 'rambo rebels' of Panguna started on their demolition job in November 1988 many people clearly thought the normal methods of containment would suffice to solve the problem. When these methods clearly failed to work, many people thought the reason lay with the peculiarity of Bougainville and all things Bougainvillean.

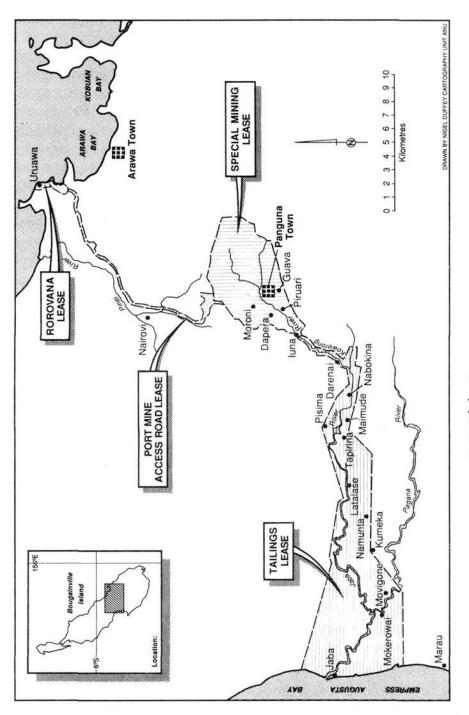
There are two main arguments behind the idea that Bougainvilleans possess a very special feeling of hatred for the mining company in their midst. The first argument is that Bougainvilleans in general, and the Nasioi language group in particular, already shared a special set of grievances against the colonial administration before they ever heard of BCL. The second argument is that the mining project was imposed upon them, against their will, by that same colonial administration, thus massively aggravating the sense of injustice which already existed.<sup>1</sup>

There is no denying the element of truth contained in these arguments, but I do not think they are sufficient in themselves to account for the origins and dimensions of the present crisis. The story of what happened in the decade between the discovery of the Panguna copper deposit in 1964, the renegotiation of the Bougainville Copper Agreement in 1974, and the celebrated declaration of North Solomons 'Independence' in 1975, has long since become an article of national and provincial mythology.<sup>2</sup> But time has not stood still for the last fifteen years. There is another story to be told about the more recent development of relationships between the mining company, the local villagers, provincial politicians, bureaucrats and businessmen. By this I do not mean the story of who did (or did not do) what when the Bougainville Copper Agreement came up for renegotiation in 1981,<sup>3</sup> but a story of social change in which individual leaders are not called upon to play the role of heroes or demons, and which is therefore not the sort of story which becomes a myth. I wish to argue that this story of social change contains some vital ingredients of the current problem and some serious obstacles to a lasting solution. What is more, this story does not seem to me to be uniquely Bougainvillean. On the contrary, it is a warning of the impact which a major mining project might well have on any other province in the country, once it has been operating on a certain scale for a sufficient period of time.

Let me put forward a fairly simple hypothesis: mines in almost any part of Papua New Guinea will generate the same volatile mixture of grievances and frustrations within the landowning community, and, all other things being equal, blow-outs will occur with steadily increasing frequency and intensity until there is a major detonation of the time bomb after mining operations have continued for approximately fifteen years. Let me now immediately qualify this hypothesis by saying that all other things are not equal, and so one cannot simply predict that recent battles around the Panguna mine will be repeated in the vicinity of Tabubil, Misima, Porgera, and so forth. In other words, I suggest that there is a general tendency for mining projects to have a negative, and potentially explosive, social impact on landowning communities, but there are many contingent factors -political and economic, historical and geographical - which affect the operation of this tendency in particular cases.

To give but one example: the lessons of the present crisis and its future resolution will be learnt, in one way or another, by other landowning communities and by those government and company agencies responsible for dealing with them. One might even hope that this learning process will reduce the risks of further violence, although my own optimism on this score is limited by my belief that the problems to be dealt with are intractable, perhaps insoluble, within the system as it stands, and by my doubts that those involved will learn their lessons properly.

There is more room for optimism on a second count. Panguna is perhaps unique, at least it is unusual, not because Bougainvilleans think of themselves as a race apart nor because they have special memories of colonial oppression, but because of some simple geographical facts which affect the crusading abilities of militant landowners. The Panguna mine occupies a central location within the North Solomons Province. It is not tucked away in some remote and inaccessible corner, like Ok Tedi, nor on a small offshore island, like Misima or Lihir. And yet, despite its visibility, the Panguna mine is in a physical location which is almost perfect for the conduct of an armed insurgency. And largely because of its inland setting and its method of waste disposal, the community of potential insurgents is unusually large. The four mining leases, stretching across from Rorovana to the mouth of the Jaba River, contain a significant proportion of the provincial population. Taken together, these factors have greatly increased the vulnerability of the project. But if we deduce from this that disaffected landowners will not have the same capacity to shut down other mining projects for long periods of time, we should not therefore assume that they will not make the attempt.



BCL Mining Leases

The argument I have just outlined contains two crucial steps which may still seem mysterious, if not downright contentious. These are:

- the implication that ethnic loyalties and conflicts have been no more significant in the genesis of the present Bougainville crisis than they have been, and will continue to be, in the development of landowner-company relationships in other parts of the country; and
- 2. my reference to the landowning communities which develop in relationship to mining companies as 'social time-bombs' a phrase which Sir Julius Chan applied to Lihir back in 1986,<sup>4</sup> and which seems even more appropriate today in view of what has happened at Panguna.

In order to pursue my chosen hypothesis, I shall now argue that there are two myths which prevent us from understanding the implications of the Panguna crisis for company-community relationships in other mining projects in this country. One is the myth of *Bougainvillean nationalism*; the other is the myth of *Melanesian communism*. I shall discuss each of them in turn. I shall then present a model of the *process of local social disintegration*, which is partly based on the evidence of what happened at Panguna but whose elements are not unique to the Panguna project. By way of conclusion, I shall make a few remarks about the ability of 'the mining industry' to deal with the realities behind these myths.

## THE MYTH OF BOUGAINVILLEAN NATIONALISM

In a recent public statement, the Catholic priests of Bougainville have traced the origins of the present crisis to 'an understanding within our people that the North Solomons is geographically, culturally, racially and economically different from other parts of Papua New Guinea' and that 'this is most clearly illustrated by the very name of the province, the darkness of its people's skin and ... the presence of the cargo cult mentality' (*Times of Papua New Guinea*, 24 August 1989). Much as I hesitate to disagree with the holy fathers, I suggest that:

- (a) the 'cargo cult mentality' is alive and well on Misima, on Lihir, in the North Fly region, and in many other parts of Papua New Guinea (see Gerritsen and Macintyre 1986 - Misima; Filer and Jackson 1989 - Lihir; Bickerton 1985 and Hyndman 1987 - North Fly);
- (b) the black skin celebrated by the Mungkas Association is only one of many physical features which Papua New Guineans use to classify and denigrate people from other parts of their country;<sup>5</sup> and
- (c) there is, to my knowledge, no traditional cultural institution which unites the majority of people in the North Solomons Province and simultaneously serves to distinguish them from the majority of people in the other provinces of this supremely diverse nation.<sup>6</sup>

Let me then suggest that the most important thing which distinguishes the North Solomons from the other eighteen provinces of Papua New Guinea, in historical, political, cultural, social and economic terms, is nothing other than the massive hole in the middle of it.

Another way of making this point is to ask what would have happened if the Panguna copper deposit had not been discovered in the middle of Bougainville Island, but in another part of Papua New Guinea. If, for example, it had been discovered on the mainland of New Ireland, then I suggest that the relative roles of New Ireland and North Solomons provinces in the history of Papua New Guinea would simply have been reversed. New Ireland would now have another name and New Ireland would have boasted the first provincial government, while Bougainville Province would still be a sleepy backwater. And if it is objected that New Irelanders could not possibly have demanded a free transfer to an entity like the British Solomon Islands Protectorate, as it then was, I can only remind you that New Ireland has possessed, for at least the last twenty-five years, a secessionist movement demanding a free transfer to the United States of America (see Filer and Jackson 1989:ch. 9, app. 4).

But perhaps the example of Ok Tedi will also be raised as an objection. Kennecott geologists first entered the North Fly region in 1968, well within the period of colonial administration, and the general consensus of opinion is that they 'were welcomed enthusiastically by the local people, who felt the exploration programme would substantially increase development opportunities' (Pintz 1984:32). Certainly this was a major contrast with the reception of CRA geologists in the Panguna area. And it is also certain that the Western District, as it then was, did not become a hotbed of resistance to the colonial administration, nor a major source of embarrassment to the independent state of Papua New Guinea.

On this score, I would say that Ok Tedi is no more or less typical than Panguna. Those who argue that resistance around Panguna was motivated by the feeling that Bougainville had been 'neglected' by the colonial administration would have a hard time in arguing that the North Fly region had been less neglected. Indeed, the North Fly region had been so much neglected that the local landowners were only too pleased to see someone take an interest in them. In the early 1960s the Bougainvillean style of anti-colonial sentiment seems to have been widespread in those parts of Melanesia which had already experienced more than fifty years of colonial rule, but was much less evident in those inland areas (like Ok Tedi) which had been more recently colonized. And beyond this, it may be argued that the special local circumstances of 'first contact' between villagers and geologists has also been a major factor in deciding the quality of their initial relationship, regardless of the political relationship between the villagers and the (colonial or national) state.

In retrospect, it does seem true that the Panguna landowners exhibited an unusual degree of hostility to the very idea of mineral exploration, but it is not so obvious that the reasons had anything to do with Bougainvillean nationalism.8 In the period since independence, landowners confronted by a major exploration effort seem to have alternated between an attitude of welcome and an attitude of ambivalence, punctuated by an occasional outburst of violent rejection. There have been occasions when one might describe the relationship between landowners and geologists as a sort of 'honeymoon' (Filer and Jackson 1989:186), especially during the early stages of exploration, in which the landowners are free to expect great things, and the geologists have no need to dispel their illusions. However, in the context of the present crisis, one can also say that there is no evidence to suggest that the presence or absence of a honeymoon makes any difference to the long-term stability of a marriage. It could even be argued that those landowners who have experienced a romantic engagement with mining companies during the process of exploration will be even more disappointed by the sordid realities of extraction than those whose marriage has been arranged against their will.

If the Ok Tedi landowners had a honeymoon in the early 1970s (with Kennecott), their marriage in the 1980s (with Ok Tedi Mining Ltd) has been a stormy one, as evident in their latest 'strike' of February 1988. This was very easily suppressed, partly because the landowners do not have the organization, and above all the population, to prolong their protests. But note also that Ok Tedi has only been operational since 1984, ten years less than the Panguna mine, and the Panguna landowners were already mounting short-term 'strikes' ten years ago.<sup>9</sup>

Like most other landowner strikes in the mining industry, the strike at Ok Tedi was primarily directed at the presence of 'outsiders' - not the expatriates who were targets of a strike by the workforce later in 1988, but Papua New Guineans from other parts of the country, whether they be working or squatting at Tabubil. It is sad but true that this fear of other Papua New Guineans is aroused by most major development projects in Papua New Guinea. If anything, I would say that the Panguna landowners are unusual for the fact that this obsession became, for them, a matter of secondary concern. Despite the standard litany of complaints about 'redskins', their ethnic grievances were complicated, on the one hand, by talk of a 'white mafia' using 'divide-and-rule tactics', and on the other hand, by resentments directed against other Bougainvilleans employed by BCL. During the 1987 national election campaign, when Father Momis unveiled his 'Bougainville Initiative', the 'Panguna landowners' were reportedly demanding the replacement of the non-landowning Bougainvilleans in BCL's Village Relations Office with expatriates, 'so that there is no bias' (*Times of Papua New Guinea*, 4

June 1987). Francis Ona and the other leaders of the 'new Panguna Landowners Association', which was founded in the aftermath of the elections, seem mainly to have targeted the 'white mafia' (BCL and the Department of Minerals and Energy) and 'the black men in top [BCL] offices' who were just 'window dressing', rather than the 'redskins' working or squatting in the Arawa-Panguna area. There is also evidence to suggest that the leadership of the new Panguna Landowners' Association had come to think of themselves as the actual or potential leaders of a *national* movement of mining landowners, and in this sense at least had certainly moved beyond the confines of Bougainvillean nationalism.

Although I stand to be corrected on this point, I would say that the old secessionist demands were notable by their absence from the agenda of the Panguna landowners in the course of 1988. One newspaper article has reported Francis Ona as saying that the Bougainville Revolutionary Army was born on the day that Defence Force troops landed at Aropa airport in March 1989 (Times of Papua New Guinea, 7 September 1989). It is true that the demand for secession is contained in letters purportedly written by Ona in February and in April (Times of Papua New Guinea, 10 February and 28 April 1989). However, Premier Kabui has indicated his own belief (personal communication) that these were responses to the death of the first 'militant' at the hands of the police, in January, and to the murder of the Bougainvillean nurse, in March, which sparked the 'payback' killing of two Highlanders at Aropa Plantation, and thus led indirectly to the deployment of troops. In a well-attested statement made on the day before her death, Perpetua Serero, chairperson of the new Panguna Landowners' Association, said that she not only 'feared secession', but that 'the whole crisis in the Province has developed into something totally different from the original demands of the landowners' (Times of Papua New Guinea, 15 June 1989). All the documents produced and observations made in 1988 support this view. 11 Just as in the colonial period, secessionism seems to have been a gut response to the violence of the state, compounded by further incidents of ethnic strife, but the violence of the state had already been prompted by actions with other motives - in this case the basic demand to close the mine.

I conclude this section by suggesting that there has been a period of twenty years, from 1967 to 1987, in which the myth of Bougainvillean nationalism has effectively concealed the social impact of the Panguna mine on the landowning community by diverting national attention, first to the balance of power between the colonial administration and the people of Bougainville District, and then to the balance of power between the Papua New Guinea national government and the North Solomons provincial government. Of course, racial and ethnic issues have always been relevant, but not, I think, in a manner which is in any way unique to Bougainville.

#### THE MYTH OF MELANESIAN COMMUNISM

The myth of Melanesian communism is the story of a village which exists everywhere and nowhere, whose traditions were manufactured at the moment of their own destruction, and whose institutions are encapsulated in a national identity which cannot be distinguished from a hundred other national identities created by the same colonial experience. Once upon a time there was a community whose members lived in complete harmony with each other and with their natural environment, who jointly owned the land to which they had a mystical attachment, who chose their leaders by consensus, settled arguments by compromise, and redistributed the products of their labour to ensure that everyone enjoyed the same condition of subsistence affluence. By general agreement, these are the 'Papua New Guinean forms of social, political and economic organization' whose preservation at the level of the village, and whose application to the business of 'development', became the fifth and last of the National Goals devised by the Constitutional Planning Committee. And so, with a bit of luck, they would all live happily ever after.

This vision of the Papua New Guinean or Melanesian village in the sky is not only a source of comfort and inspiration to members of the national political élite; it has also been seen by all sorts of expatriates for as long as expatriates have been around to see it. Enlightened colonial administrators, romantic anthropologists, syncretizing Christian missionaries, fly-by-night consultants, and a host of other characters, including the executives of mining companies, have all helped to construct this image of 'traditional Melanesian society'. And they had no great trouble doing so, because it is the image of a communist Utopia which Europeans had invented long before they came to Melanesia. Only in the villages themselves, the real ones on the ground, does it appear to be what it really is: a dream of something radically different from the present *and* the past.

If this is so, what general statements can be made about traditional society and the experience of social change in hundreds of distinct communities and in a country justifiably renowned for the diversity of almost everything which it possesses? There are not many, and those which I put forward here will surely be disputed, but they do have an important bearing on my present subject.<sup>13</sup>

My most general statement would be that Melanesian communities have always been on the verge of disintegration, even in pre-colonial times, and it has always taken special qualities of leadership, in each succeeding generation, to prevent them from splitting apart at the seams. In pre-colonial times, such efforts were directed to the pursuit of warfare, the practice of initiation, and the organization of large-scale gift-exchange, but the rules of these games were no more permanent than the social groups whose continuity depended on the

outcome. Colonialism itself had a complex and contradictory impact on this unstable state of affairs.

From the outset, the suppression of tribal fighting, the demarcation of communal territories, and the incorporation of these spatial units into the structure of colonial administration had the effect of fixing and preserving a particular moment in the fluctuation of social fortunes. Those institutions and relationships which happened to exist in each community, at this moment of subordination to colonial rule, then came to be perceived, like an old photograph or a stuffed animal, as a peculiar and ancient legacy. But the question of whether these customs should now be preserved, modified or discarded was only the first of many new sources of social conflict within and between the local groups whose physical existence had come to be guaranteed by the rule of law.

The new regime created opportunities for modernizing leaders to establish their authority as middle men between the colonizing institutions and the rural population, even to enlarge the scope of their authority beyond the confines of their own communities; and yet their chances of success were limited, just as the cost of failure was reduced, by the impossibility of wiping out the opposition. Second-hand white man's magic was not much of a match for the spreading fears of home-grown sorcery, for it was hardly more effective in achieving social harmony than in reducing the disparities of wealth and power between the colonizer and the colonized. On the contrary, each new addition to the institutions of 'development' has subtracted something from the solidarity of the community by dividing a diminishing amount of authority between a growing number of leadership roles.

In so far as customary forms of co-operation have been set aside by modernizing forms of leadership which then failed to deliver the goods expected of them, so has popular disappointment provoked those new dreams of social order which have been called 'the cargo cult mentality'. But this third road to power, which promises to lead beyond the fractured images of custom and development, through a variety of 'new deals' with the supernatural, leads only to another form of leadership and extra space for social conflict to occur.

If I seem to suggest that rural communities have been in a condition of perpetual turmoil and virtual anarchy for as long as anyone can remember, then I should correct this impression by saying that the rate of social change has normally not been so great as to prevent each generation of leaders, in each of these communities, from arriving at their own 'Melanesian compromise', making their own peace with God and with each other, for as long as their leadership lasts. The majority faction in each new generation may choose to take a different 'road', and each new road may later prove to be a dead end, but the process of social change has itself created new forms of 'initiation' (the experience of Japanese occupation,

indentured labour recruitment, high school education, et cetera) which mark the boundaries of each new generation and impose some sort of order on the transfer of authority between them.

Now I would argue that one of the lessons of the Bougainville crisis is that large-scale mining projects not only have the effect of speeding up the rate of social change in the surrounding communities, but also undermine the sort of compromise which has 'traditionally' been sufficient to contain or counteract the forces of disintegration. By so doing, they destroy the myth of Melanesian communism and replace it with a mental waste land where the 'Rambo' style of leadership appears to be the only valid road to power.

#### THE PROCESS OF SOCIAL DISINTEGRATION

There is an idiomatic turn of phrase in Tok Pisin which describes the situation in which an individual has embezzled group funds: 'wanpela pinga i bruk insait long dispela samting' (one finger is broken in this matter). I suggest that the process of social disintegration which is brought about by large-scale mining projects can be compared to the process of breaking all five fingers in the outstretched hand of the landowning community, one by one.

The process of disintegration has a number of distinct aspects or phases, each of which can be considered as a process and a problem in its own right. I shall call these the problems of *delineation*, *distribution*, *stratification*, *inheritance* and *succession*. Taken together, they constitute a vicious circle, where each problem is constantly magnified by the impossibility of resolving the others, and the net result is an exponential accumulation of 'bad feelings' (as expressed in the Tok Pisin words *wari* and *hevi*) which must sooner or later have their day of reckoning. To judge by the Panguna case, the total process of disintegration, starting with the process of delineation and ending with a drastic solution to the problem of succession, takes approximately twenty years, five of which precede the start of mining operations while the other fifteen follow it.

The process of delineation defines the outer limits of those areas of customary land which are to be leased by the owners to the government, and by the government to the company, for the purpose of mining and related activities, and subdivides these lease areas into blocks or 'titles' which are held to belong to particular 'family groups'. <sup>14</sup> The straight lines which compose the geometrical shape of each mining lease bear little or no relation to those tribal or communal boundaries which have previously been established by the process of colonial administration. Nor is there any time for the new 'community' of landowners to develop their collective identity, because their land is simultaneously split up into units of *de facto* private property, each one neatly drawn and measured on the map, and each one registered under the name of an individual 'titleholder',

normally male, who successfully presses his claim to leadership of the group to which it 'really' belongs. This procedure instantly abolishes those very elements of flexibility and instability which are essential to the customary ownership of land in Melanesia. A whole dimension of existence is eliminated by this jigsaw puzzle of a map, which then becomes not just a puzzle to the people but a secret weapon in the hands of the authorities. It may be no coincidence that Francis Ona chose to train as a *surveyor*, was employed by BCL in this capacity, and could thus claim that he had stolen back the secrets of the sacred map. 16

The purpose of the delineation exercise is to determine who will be entitled to exactly what proportion of the royalties, occupation fees, and compensation payments which the customary landlords will receive by way of 'rent' for the use and abuse of their land by the mining company. Although the titleholders constitute a relatively small minority within the landowning community, there is no outside interest in the question of whether and how they will use these moneys for the benefit and satisfaction of their respective family groups. It has evidently been assumed that 'customary' norms of distribution and consumption will apply to this new form of wealth, and this will raise no special problems for the company or for the government. But the complaints of the new PLA have shown that this assumption is false. 17 The titleholders stand accused of keeping all the money to themselves, not even giving any to their closest relatives. If this is true, it might be taken as a sign of selfishness or greed, but I suggest that it may also be a sign of something else; the simple absence of a custom which prescribes the proper way to redistribute rent. If that is the case, the titleholder may justifiably believe that any further transfer of the money he receives will cause more arguments than it resolves - and so he keeps it to himself.

When the Panguna militants talk about a 'class struggle' within the landowning community, they are no doubt partly thinking of the cumulative outcome of decisions such as this, where each new round of cheques is 'locked up' by an ageing group of titleholders, progressively reducing their authority within the clans and families which they are meant to represent. But they are also thinking of the inequalities of wealth and power which have emerged within the titleholding 'class'. These inequalities are partly derived from differences in the size of the entitlements established by the delineation process, and they may well have been exaggerated by differences in the way that individual titleholders have dealt with their receipts. But they were surely consolidated, and have since been enlarged, by the formation and operation of the Road Mining Tailings Leases Trust.

This organism was established under the terms of the 1980 compensation agreement between BCL and a group of twelve titleholders who 'represented' the landowning community as a whole. <sup>19</sup> Under the terms of that agreement, certain

types of compensation would be paid directly into the Trust, and the Trustees were then charged with the double task of investing this money for the benefit of future generations while spending the income from such investments for the benefit of the wider community. But, for reasons which are not entirely clear, formal membership of the Trust was never extended to the whole body of titleholders (according to the Applied Geology Associates report [1989:7, 11], there were seventy-five voting members in November 1988), while effective control of the funds soon passed into the hands of what appeared to be a self-perpetuating band of local businessmen, part of that class of Bougainvilleans who have apparently grown fat from eating at the table of the mining company.<sup>20</sup> The stratification of the landowning community thus proceeded to the point at which an inner circle of comprador capitalists acted as the bankers, and sometimes as the patrons, of a middle class of petty landlords, living on the leftovers from the mining feast, while the outer circle of workers and peasants were left to fend for themselves.

However, the language of class fails to register the fact that these capitalists, landlords, workers and peasants are related to each other by customary, and often intimate, bonds of kinship, and are distinguished from each other by the lines of age and seniority as well as by their economic situation. The problems of distribution and stratification are problems in the economic relationship between individual members of the landowning community. But individuals grow up, grow old, and pass away - just like the mining operation at Panguna. And in so far as their relationships have been conditioned by this mining operation, they have also been distorted by the fact that human beings, unlike mineral ore bodies, reproduce themselves and must, in some sense and in due course, have their places taken by another generation. As mining proceeds towards the point of exhaustion, the question of which landowners get what benefits becomes a question of what, when and how one landowner will inherit from another.

Identification and compensation of the Panguna landowners has proceeded on the bland assumption that inheritance takes place when people die. This assumption, which has evidently been inherited from the colonial administration, seems quite natural to people born and brought up in the world of private property, but in the world of Melanesian custom it would probably be more correct to say that death is timely if and when the process of inheritance has been completed. If the Panguna titleholders have been reluctant to initiate this process, this may not simply mean that they have come to share the assumptions made by the Land Titles Commission and BCL's Village Relations Office, but may arise from the same mixture of motives which has prevented them from redistributing the cash to which they are entitled.

Their reluctance will almost certainly have been compounded by the local tradition of matrilineal inheritance, because this form of inheritance is notoriously

vulnerable to the institutions of private property. Even the cultivation of cash crops on customary land is known to have threatened the integrity of the matrilineal principle in those Melanesian communities which subscribe to it, because cash crops have come to be defined as male property, so there must be an expectation that this custom will be further undermined when cash values are attached directly to the land itself.<sup>21</sup> The male titleholder, torn between the claims of his own and his sister's children, may simply be unable to settle the issue in his own lifetime, but the titleholders of Panguna have presumably been dying with increasing frequency, and matters left unsettled at their deaths will have been accumulating in the heart of the community like social versions of the waste material which BCL discharges from its mine. The irony of this analogy, of course, is that the time through which disputed cases of inheritance remain to be resolved is also time through which the monetary value of the titles in dispute is rapidly declining.<sup>22</sup> Once the mine shuts down, the legacy is likely to consist of heated arguments about the ownership of land whose monetary value has dissolved, and some of which will otherwise be wholly useless. The Trust Fund was established with the worthy aim of postponing this nasty moment of truth by providing a form of rent that would outlast the closure of the mine. But if people cannot trust their own mothers' brothers to abide by the rules of matrilineal inheritance, how could they trust the Trustees to dispense the legacy of the entire community with any kind of justice?23

Just as the problem of inheritance reflects and supersedes the problem of distributing the benefits and costs of mining, so the problem of succession to leadership of the landowning community reflects and supersedes the problem of social stratification within it.<sup>24</sup> The problem is that power and influence associated with a form of wealth which cannot be distributed by custom are themselves immune to any customary method of transmission. If this form of wealth is 'locked up' by the leaders of a single generation, then leadership itself becomes the price which they must pay for keeping it, as power is stolen from them by the leaders of the generation which is being disinherited. This is clearly what has happened at Panguna. And, once again, the very nature of the mining project, huge in scale but limited in its duration, seems to have progressively reduced the intervals between those moments of 'initiation' whereby leadership is transferred to successive generations. One of these moments occurred between 1978 and 1980, with the formation of the original Panguna Landowners' Association and conclusion of the new compensation agreement with BCL - events which are seen to have spelt the demise of the first generation of local leaders who dealt with the mining project in the late 1960s, as well as the first signs of the subsequent conflict between the second and third generations.<sup>25</sup> The credibility of the second generation certainly seems to have evaporated by 1987, when the

formation of the new Panguna Landowners' Association marked the start of another 'coup' within the landowning community. If this third generation of leaders should now prove willing to accept the 'package' being offered to them by the government, their compromise might not secure their influence for more than three or four years at the most. One might indeed conclude that those who would be willing to accept this brief ascendancy have thereby lost their influence already.

When the late Perpetua Serero said that 'mining causes mental illness', she was almost certainly referring to the widely held belief that BCL is damaging the brains of local people by discharging noxious substances into their physical environment. The company and the government have both taken a great deal of trouble to convince the local people that this could not possibly be happening. That I suggest that the appeal which they have made to chemical and biological realities has largely missed the point - which is that local people see and feel the transformation of their physical surroundings as the outward symbol of the damage done to their society. And it is this deeper sense of social disorder, originating in the problem of delineation and culminating in the problem of succession, which has induced the sort of 'craziness' which is so blatantly impervious to compromise. The surface of the sort of 'craziness' which is so blatantly impervious to compromise.

The infamous demand for ten billion kina has understandably been taken as evidence of a lost grip on reality, the reduction to absurdity of the 'handout mentality'. But the insanity of this demand does not reside in the belief that such amounts of money can or will be paid. Those who know the way in which it was originally raised, in March 1988, will also know that it was raised as an alternative to the demand for total closure of the mine.<sup>29</sup> And yet the choice of this alternative reveals the motives of the authors in a manner which has not been widely understood by those who think that money talks. On the one hand, the demand for ten billion kina says that no quantity of money can compensate the community for the damage which it has suffered, and thus pours scorn on the first principle of corporate accountancy: that every man has his price. On the other hand, it proposes the impossible condition that if every man, woman and child within the landowning community were to become an instant millionaire, then and only then would the material rewards of mining not provoke an endless round of social conflict. If there is madness here, then I suggest it is the desperation of people suffering from acute cultural indigestion, whose eyes have seen through the myth of Melanesian communism while their fingers have been burnt or broken by the hand-outs which sustain them.

## THE FORUM/PACKAGE CONCEPT

My account of the social disintegration of the (large) 'landowning community' which has been created by the Panguna mining project may seem too

abstract and mechanical to be an accurate reflection of the local social impact of the mine. My account certainly errs on the side of simplification, but that is largely unavoidable and also serves a useful purpose in the context of the present question. It is unavoidable because of the very slender body of published evidence on the local social impact of the Panguna mine over a crucial fourteenyear period between 1974 and 1988, which obliges the social scientist to make large inferences from a small amount of data. But it is useful if it serves to emphasise the *possibility* that the 'Bougainville crisis' is not a unique blemish on the body politic of Papua New Guinea, but the outcome of a social process which may generally be expected to accompany certain types of economic development but which here, in Bougainville, has reached an extreme and unprecedented form. The possibility with which I am immediately concerned in this paper is that mining projects in Papua New Guinea all have a similar disintegrative effect on the social structure of the landowning (or local) community, even if the 'size' of this effect may be expected to vary in accordance with the scale or duration of particular projects.30

The strategies with which I am concerned in this second part of the paper are not strategies for 'resolving' the Bougainville crisis as it stands, but strategies which have been or might be adopted to prevent the recurrence of such a violent outcome to the relationship between other local communities and other mining projects in Papua New Guinea. The crisis has now acquired a momentum of its own, as the original grievances of the 'landowners' have been overlaid by grievances against the security forces, and simultaneously stirred up by the myth of Bougainvillean nationalism and a variety of populist sentiments, until the whole question of national identity and national development is at stake. But if we keep our eyes focused on the mining industry, we can see that the government and the mining companies are still proceeding on the assumption or in the hope that other mining projects will continue to sustain the national economy, even if Panguna stays shut for a long time. And we must therefore ask what the government and the mining companies are doing to ensure that other projects will not at some future date be closed down for good by community strikes, and thus to sustain their own hopes or assumptions.

Of course the answer might be that they are not doing very much because they really do believe that the Bougainville crisis is the unique result of a series of accidents and mistakes which occurred back in the colonial period, and that subsequent mining projects, starting with Ok Tedi, have been established under completely different circumstances. It is in fact rather difficult to say how the Bougainville crisis has affected the rest of the mining industry in Papua New Guinea because debate on this subject is mainly conducted by people with fairly obvious axes to grind. The industry and its bureaucratic allies can be expected to

put a brave, business-as-usual face on the matter, even while politicians are constantly popping up like demons in a video game, proclaiming the necessity or inevitability of a comparable crisis in their own backyards. One also suspects that fluctuations in the prices of gold and copper have a larger effect on both the confidence and the behaviour of mining company executives than does the risk of local protest movements getting out of hand. However, the public statements emanating from the larger mining companies, the Chamber of Mines and Petroleum, and the Minister/Department of Minerals and Energy, do indicate that the problem of 'dealing with landowners' is now taken a good deal more seriously than it was before the so-called 'mineral boom' became an object of intense political debate, and even more seriously in view of the turn which that debate has taken on Bougainville.

Mining industry spokesmen appear to believe that it is possible to control the actual or potential opposition of local landowners to other mining projects by adjusting the size and contents of their compensation 'package' through a form of consultation which the present government calls a 'development forum'. The explosions of discontent on Bougainville do not seem to have prevented the successful conclusion (in April 1989) of a Mining Development Contract for the Porgera project after a protracted and tortuous series of negotiations between the developers, the national government, the provincial government and the landowners. This process of consultation, which came to be known as a 'forum' some time after it had actually started, has supposedly produced a 'package' which includes, amongst its other delights, a sort of insurance policy against 'strikes' by landowners or other local interests.<sup>31</sup> The 'forum/package concept' was simultaneously extended, as a matter of national government policy, to all major mining projects in Papua New Guinea, not only those (like Lihir or Hidden Valley) which are still in the planning stage, but also those (like Misima, Ok Tedi and Panguna) which are already operational under previous mining agreements. Following the wrapping and unwrapping of the Porgera package, we have thus witnessed applications of the forum/package concept to the awkward task of stitching together a new deal between Ok Tedi Mining Ltd and the people of the Fly River (Post-Courier, 15 June, 25 August, 14 September and 2 October 1989; Times of Papua New Guinea, 5 October 1989), and even to the ultimate task of resolving the Bougainville crisis itself (Post-Courier, 26 April, 4 May, 22 August, 5 and 21 September 1989), although the latter effort quickly proved abortive.

Without going into the detail of what is contained in these various packages, we can already see that the forum/package concept rests on two significant assumptions.

 That there is a way of distributing the benefits and costs of mining that will satisfy each of the four parties to a mining development forum (we can think of this as a way of cutting up the 'cake' which will keep all parties happy for the time it takes to finish eating it).

2. That there is a form (perhaps even a Papua New Guinean form) of consultation or dialogue between the four parties which is able to produce this mutually satisfactory arrangement. On the basis of this arrangement, lasting commitments can then be made by the signatories to a formal agreement.

I think that these assumptions are not only questionable in their own right, but also have the effect of concealing the problem of social disintegration which I have outlined in the previous section.

Public debate on the mineral cake-slicing issue in Papua New Guinea can often seem like a dialogue of the deaf. The main reason for this is confusion over the question of what is being distributed. Central government departments (and their ministers) may be talking primarily about the distribution of quantifiable economic benefits, including compensation for quantifiable environmental costs, while other participants often appear to be talking about the distribution of 'rights' or 'powers' (to say 'yes-or-no'), or about costs (and even benefits perhaps) which cannot be quantified or priced. In addition, much of this debate has a David-and-Goliath quality, in which the 'customary landowner' is counterposed to the wicked multinational corporation and its political or bureaucratic allies, and emotional identification with the underdog or the 'grassroot' simply fails to engage with an economic discussion of costs and benefits.<sup>32</sup>

But while it may be true that the mining companies and the central government departments (Finance, Prime Minister's, Minerals and Energy) share an 'economic' perspective on the distribution question, it is also true that the central government departments, unlike the mining companies, are engaged in the pursuit of explicit 'national goals'. In this case the relevant national goals (as stated in the Constitution) appear to be:

- 4.1 'wise use to be made of our natural resources and the environment in and on the land or seabed, under the land, and in the air, in the interests of our development and in trust for future generations';
- 3.6 'the State to take effective measures to control and actively participate in the national economy, and in particular to control major enterprises engaged in the exploitation of natural resources'; and
- 2.3 'every effort to be made to achieve an equitable distribution of incomes and other benefits of development among individuals and throughout the various parts of the country'.

From a technocratic point of view, the 'forum/package concept' is both a way of controlling the relationship between mining companies and local interest groups (landowners, communities, provincial governments) and a way of trying to

maintain the principles of long-term benefit and 'regional equality' at a national level, against the special pleadings of these local interest groups.<sup>33</sup>

Nevertheless, despite the differences in their ultimate goals, the central government departments and the mining companies do share the immediate problem of determining the lowest reasonable cash cost, to themselves, of purchasing the support and co-operation of these local interests for the duration of each new mining project being proposed. (The mining companies, of course, have the additional problem of gaining the support and co-operation of the national government, and vice versa.) Since both parties tend to approach this problem in a similar way, through the spectacles of accountancy, we can say that there is a sort of technocratic consensus between the companies and the national government on the problem of constructing 'packages' for landowners. Unfortunately, this method of approaching the problem does not have widespread popular support, least of all amongst the local interest groups themselves, to judge by the waves of populist sentiment which wash through the local newspapers. Indeed, the frequency with which new packages are unveiled for public inspection might almost serve to confirm the popular impression that each one is an elaborate confidence trick on the part of the mining industry.

The 'forum' part of the 'forum/package concept' might therefore be regarded, somewhat cynically, as the method by which this confidence trick is played, or the way that the cards are dealt by the organizers of the game. But this way of regarding the process of negotiation suggests the existence of a conspiracy between the companies and some national government departments which is much easier to imagine than it is to demonstrate in practice. It would be more accurate to say that the 'hands' of the national government, the provincial government, and the landowning community, in what appears to be a four-handed game with a particular mining company, are all shared by a number of individuals (for example, national or provincial politicians) and organizations (for example, national or provincial government departments) whose own interests are by no means identical. This means, amongst other things, that 'the government's' interest in a mining project is a very difficult thing to pin down, and so likewise is the idea of a 'government strategy' for dealing with either landowning communities on the one side or mining companies on the other side of the negotiating table. The Department of Minerals and Energy may sit next to the mining company, but that does not mean either that the company controls the Department of Minerals and Energy or that the Department of Minerals and Energy (or any other government department) controls all the other 'government' players in the game. The negotiating table might have four sides, but there are certainly more than four players in the game of producing mining agreements.

From this point of view, the forum concept can be seen as a way of organizing the game in such a way that 'the mining companies and the national government' do a deal with 'the provincial government and the landowners', and thus bring some semblance of order to what might otherwise become an interminable process of discussion. The Department of Minerals and Energy Division of Policy and Co-ordination may have the job of organizing the dialogue between the four 'parties', and if one thinks of this dialogue as a zero-sum game one may wish to ask if the cards are therefore bound to be stacked in favour of 'the mining companies and the national government', but the more important question is whether the process of negotiation and consultation which is actually carried out does have the effect of producing solid and long-lasting agreements based on the equitable satisfaction of a range of divergent local interests. I am inclined to think of this process as a game of strip poker in which everyone expects to lose some of their clothes but no one wants to lose all of their clothes, and which is supposed to go on until everyone is satisfied with the total amount of clothing which has so far been removed. From this point of view, the packages produced by 'the national government and the mining companies' for the benefit of 'the provincial government and the landowners' are to be regarded as claims that this state of mutual satisfaction has in fact been reached or is at least in sight. The question is whether, and for how long, these claims prove to be correct.

Of course, the forum concept can and has been justified by some of its supporters, like Justice Minister Bernard Narokobi, as a method of planning and decision-making which exemplifies or should exemplify some peculiarly Melanesian or Papua New Guinean spirit of compromise between the interested parties. From this point of view, the process of consultation can almost be regarded as an end in itself, because it is a way of achieving yet another national goal (1.6), which is for 'development to take place primarily through the use of Papua New Guinean forms of social and political organization'. But it seems to me that the question of what, if anything, is 'Papua New Guinean' about the process of consultation which actually takes place is something of a red herring (like the question of whether the policies pursued by the Department of Minerals and Energy are part of the 'unacceptable legacy of Australian colonialism') when compared to the question of what actually emerges from the process by way of an agreement.

The spirit of Melanesian compromise has the same relationship to the process of consultation as the rights of the customary landowner have to the package which it produces. In both cases we are given to understand the necessity of extracting a principle of 'custom' from the myth of Melanesian communism and injecting it into the legal, fiscal and bureaucratic framework of the mining industry, but, to the best of my knowledge, there has been hardly any serious discussion of

how this is to be done, or by whom, so the bureaucratic process of planning, negotiating, and managing mining projects rolls on regardless, while 'custom' pops up from time to time as an obstacle or a nuisance to the achievement of bureaucratic objectives.

Returning now to the problem of social disintegration, I think it can be seen that discussion of the 'forum/package concept' as a form of distribution and a form of consultation tends to ignore this problem altogether, partly because of the assumptions made by the proponents of the concept, and partly because of red herrings derived from the myth of Melanesian communism. It is interesting to note how little reference has been made in the mineral policy debate to yet another national goal (5.4), which is for 'traditional villages and communities to remain as viable units of Papua New Guinean society, and for active steps to be taken to improve their cultural, social, economic and ethical quality'. My own argument is that 'traditional communities' may well not remain as 'viable units of Papua New Guinea society' when they find themselves (or lose themselves) in the vicinity of a large-scale mining project, and if large-scale mining projects really do engender a process of local social disintegration, this is partly because of the social effect of whatever 'package' of material benefits has so far been distributed as the price of local co-operation. The tragic irony of the package concept can be expressed in the form of a hypothesis concerning the so-called 'handout mentality': that the degree of strife within a 'landowning community', especially between the leaders of successive generations, is proportional to the size of the 'packages' which have been delivered to the community by a mining company and the various agencies of government. As we have seen, the Bougainville crisis contains a number of elements which should encourage us to think along these lines. Although the evidence is by no means conclusive, there is evidence enough to indicate that the economic steps which are taken to compensate local people for the damage done to their physical environment may have a negative social impact of their own, and thus add further insult to existing injury. The construction of new 'packages', each more generous than the last, may thus have the seemingly paradoxical effect of intensifying the resentment of the recipients, and thus exaggerating the scale of their further demands to the point of absurdity (ten billion kina), so that the whole exercise becomes a vicious circle.

Such is the irony of the package concept. The irony of the forum concept would then be that these packages also function as time bombs which ultimately destroy the 'spirit of compromise' (Melanesian or otherwise) which entered into their creation. The spirit of compromise is one thing which has been very obviously lacking from the behaviour of the Bougainville 'militants', at least from the foundation of the new Panguna Landowners' Association in late 1987. The whole style of ultimatums, bombs and bullets has made some very serious dents in

the philosophy of the Melanesian Alliance party and the myth of Melanesian communism. This point has been noted by a number of local commentators, but has generally been treated as a problem concerning the 'leadership' which is exercised by various individuals - the Prime Minister, Father Momis, Premier Kabui, Francis Ona, and so forth (see, for example, the commentaries by Siaguru [1988,1989]; Senge [1989a, 1989b]; Hannett [1989]; and Momis [1989]). My own argument is that leadership is not just a quality possessed by certain individuals, but also a problem in the relationship between successive generations in rapidly changing communities, that this relationship may be severely strained by the problem of handling compensation packages, and that this strain is connected in some way with the growth of that 'uncompromising militancy' which has been a hallmark of the Bougainvillean rebellion. The origins of the Bougainville crisis should certainly alert us to the likelihood that 'deals' done with one generation of landowners, or their leaders, will be repudiated by the next generation, regardless of the manner in which these deals are negotiated. So far as the forum concept is concerned, one might then suggest that the form or extent of consultation with landowners may have little or nothing to do with the social impact of the 'deals' which have to be done, so attempts to reform or expand the process of consultation will not make much difference, in the long run, to the perceived validity of agreements between landowners, mining companies and government agencies.

#### SOCIAL IMPACT AND COMMUNITY RELATIONS

If it is true that public debate about the mining industry in Papua New Guinea has largely been diverted from the problem of local social disintegration, this does not necessarily mean that the mining companies and some relevant government agencies are unaware of the problem or lack strategies for dealing with it, but may only mean that they and other participants in the debate see no reason to make a fuss about it. I think it can be said that the larger mining companies and one relevant government agency, the Department of Minerals and Energy Policy and Co-ordination Division, do have strategies for dealing with this problem: they have 'community liaison' programmes which are partly founded on a recognition that the social (as opposed to the economic) impact of mining projects on local communities is indeed likely to be negative, even if the nature of this negative impact is something of a mystery; and there is a bureaucratic process of planning for negative social impact, which involves the conduct of social (and economic) impact studies of various kinds, in which the Department of Minerals and Energy has played an organising role on the government side, while the companies have also taken their own counsel.

On the other hand, it is no easy task to devise a community liaison programme, or any other public relations programme, which can actually limit or control the community breakdown process. This encourages argument about who is responsible for controlling which aspect of this process, which makes it even more difficult to find a bureaucratic or technocratic solution to the problem. 'Community relations' in the mining industry is a veritable minefield, in which anything resembling a strategy is likely to blow up in the face of its owner and everyone involved would like to pass the buck to someone else. But it is still a game which must be played, however many no-win situations it contains.

The Socio-Economic Impact Study (SEIS) saga illustrates the point. The SEIS is the document (or collection of documents) which should contain any predictions concerning the negative social impact of a mining project, and which may also contain recommendations or proposals for the monitoring and mitigation of such impact. Responsibility for the production of this document has passed successively from the mining companies to the Department of Finance, thence to the Department of Minerals and Energy, and back again (in 1988) to the mining companies, although such documents have always been written by private consultants.<sup>34</sup> In the period when the Department of Minerals and Energy held the co-ordinating role, the consultants were hired and paid by a 'steering committee' or 'liaison committee' which represented a variety of government departments, including the relevant provincial department, as well as the developer. The landowners were not formally represented on this committee (which is what distinguishes it from a 'development forum'), but the SEIS itself was part of the process of consultation with them. The terms of reference required the consultants to recommend (amongst other things) strategies to 'lessen undesirable social influences and impacts of mining on the project area, the local community, the district and the province', 35 but without indicating which organizations would take responsibility for what sort of activities. The consultants have operated on the assumption that recommendations could be made to any and all of the organizations represented on the steering committee. The mining companies have submitted their own perceptions of their own responsibilities as part of their draft environmental plans, while the Department of Minerals and Energy has attempted to co-ordinate the government response to the recommendations contained in the original SEIS report.

No sooner had this procedure become relatively well established in the minds of the participants than attempts were made to change it. In 1988 Cabinet endorsed a proposal that production of the SEIS should no longer be the joint responsibility of the government and the developer, but the sole responsibility of the developer. As I understand it, the argument behind this proposal was that the only legislation relating to the 'social and economic impact' of mining projects is

the Environmental Planning Act (1978), which requires the developer to include a socio-economic impact assessment in the draft environmental plan which it submits to the Department of Environment and Conservation, and that department, not the Department of Minerals and Energy, should therefore have the role of coordinating the government response. This change has the effect, perhaps not intentional, of reducing the government's own capacity to predict, monitor and manage the negative social impact of mining projects, by removing government input to the relevant planning process. Left to its own devices, the developer is bound to produce a Socio-Economic Impact Study which presents the impact of the project in a favourable light, but the government's capacity to make an independent assessment of the claims made in this part of a draft environmental plan is now more limited than it was under the previous arrangement, when the consultants were partly employed by the government.<sup>36</sup>

In practice, the extent of this change has not been very great. The Department of Minerals and Energy continues to organize what are now called 'baseline planning studies' instead of 'socio-economic impact studies', and otherwise continues to co-ordinate the process of consultation between the company and various other government agencies.<sup>37</sup> The companies continue to commission impact studies of their own, but may not publish the results unless required to do so by the government, and the Department of Environment and Conservation continues to administer the *Environmental Planning Act*. The main change has been experienced by the consultant (like myself) who is now placed in the position of either working for the company or working for the government, but never both at once.

The point here is not to discuss the merits or demerits of any particular method of organizing social impact studies, nor for that matter to complain about the small amounts of money which the government and/or the companies have seen fit to spend on the conduct of such studies (see Burton 1989), but to ask why the government should thus be reducing its own (limited) capacity to plan for the negative social impact of mining projects at the very same time that the Panguna crisis was coming to the boil. My own answer would be that several government agencies, with a good deal of popular support, have decided that the best way forward is to leave all 'social problems' to the people who create them - in this case the mining companies.

We might call this the 'Pontius Pilate' strategy. It must at least seem like this to the mining companies, when they find themselves being accused, as they often are, of adopting 'divide-and-rule tactics' towards their host communities.<sup>38</sup> The irony of this accusation is that such tactics are part of a strategy of *rule*. The mining companies may protest that they have no interest in ruling anyone but their own workforce, but if they end up 'ruling' their host communities by default,

because the government fails to do so, they certainly have no interest in fomenting divisions and conflicts within these communities once an agreement has been made with the putative leaders of these groups, because such conflicts are almost bound to affect the stability of this agreement, and even threaten the main business of extracting minerals, as the Panguna case perfectly illustrates.<sup>39</sup> This is a no-win situation for the mining companies. They would much prefer to deal with united communities, assuming of course that some previous process of consultation had produced an apparent consensus in favour of the project; they have community relations programmes which really are designed to maintain this original appearance of community support. But if divisions arise within a community as the unintended consequence of actions which a company is obliged to take under the terms of its agreements with the government and the 'landowners', the company can still expect to collect the lion's share of the blame, regardless of the size and content of its public relations budget.

It is easy enough to criticize BCL's Village Relations Office for its failure to maintain local support for the mining project, but this only illustrates a more general problem with community liaison programmes in the mining industry, whether they are mounted by the industry or by the state. The problem is that these programmes are part of a bureaucratic process which is established by the original process of planning and consultation which precedes the signing of mining agreements. In this original process company and government staff deal with individuals who appear to be the leaders of their communities, whether they be clan elders, local councillors, or whatever. But the story of the Panguna project suggests that the authority of these leaders within their own communities may well be undermined by the very fact of their having been party to some previous agreement, and even further undermined by the support which they seem to receive from community liaison officers. Since the community liaison function tends to be localized in the operational stage of a mining project, this means that a group of Papua New Guinean staff are placed in the invidious position of being seen to practise the so-called 'wantok system', because they cannot settle the disputes between generations and factions within the landowning community, and are even obliged by previous agreements to recognize the overall leadership of what has since become a minority faction.

The problem is ultimately one of reconciling the inherent flexibility and fragility of 'traditional' social structures and the inherent rigidities of legal and administrative frameworks. This problem seems to be recognized by those who wish to inject a dose of 'Papua New Guinean ways' into the process of consultation (by an extension of the 'forum concept'), but it is not so obvious how the current practice of consultation is serving to resolve it. If we take only the example of land delineation, we find that this particular form of 'consultation'

between the landowners, the company, and the government is still undertaken in ways which have not changed in any significant respect since independence, and we might therefore be tempted to say that this is another instance of the nasty colonial legacy which ought to be replaced. But if one goes on to ask how a particular 'package' of royalties, occupation fees and compensation payments could and would be distributed within a landowning community if *not* on the basis of customary titles delineated on a map, the answer is not so obvious.

In my own capacity as a consultant, I have experienced first-hand the difficulty of recommending strategies to 'lessen undesirable social impacts on the local community', whether they be company or government strategies, while recognizing that community liaison programmes of all sorts may be largely irrelevant to the basic issue, which is the process of social disintegration engendered by the economic relationship between the company, the government and the community. The trouble is that there may be no economic relationship between the landowners and the developers which will curtail this process, given the dimensions of the project and the original demands of the landowners or their leaders. Changes can be made in the size or composition of the package(s) to be offered to the landowners, or in the method of negotiating agreements with them (including the 'forum'), or in the design of community liaison programmes, but no one is going to get very far with a suggestion that the companies or the government should try to persuade local landowners, in advance, that compensation is bad for them, because the landowners will surely believe that this is a confidence trick (they might be right), and because the whole tenor of government policy (and popular opinion) is shifting in favour of a bigger package (and a more extensive process of consultation).

# THE BOTTOM LINE

I do not wish to seem overly pessimistic. No doubt there are some steps which can be taken, either by the companies or by the government, within existing political constraints, to limit the social damage caused by successive mining projects, and thus improve the prospects and the public image of the mining industry as a whole. Even if my own caricature of the process of social disintegration fits the Panguna case, political and cultural contingencies, including the demonstration effect of the present crisis, will surely prevent any precise repetition of this process.

If it were possible, at this time, to verify my suggestion that landowner compensation packages are time bombs which can be expected to explode about twenty years after they are first negotiated, as in the Panguna case, then mining companies might be tempted to look for projects which would not last more than (say) fifteen years. But the hypothesis will only be verified by experience, and the

industry has many other factors to consider when determining the optimum lifetime of a mining project, so one should not expect the mining companies to adopt 'high-grading' strategies simply because of the risk of being shut down by another Francis Ona in the year 2005 (for example).

Other mining companies can distance themselves from the misfortunes of BCL, but the Papua New Guinea government cannot distance itself from the Bougainville crisis, because one of the social costs of that crisis has been the authority of the state itself. (In the game of strip poker, the state has suddenly lost a lot of its clothes.) If 'the government', or some agency of government, were to decide that the social cost of large-scale mining projects was really very substantial, especially in view of the national goal for 'traditional villages and communities to remain as viable units of Papua New Guinean society', then the question would be whether the addition of this negative social impact to the admittedly negative impact of each mining project on the physical environment outweighed the economic benefit to the nation or the state. This may seem like a stark choice - mining or no mining, 'yes-or-no' (as Francis Ona would say) - but bureaucrats and politicians both have ways of fudging this question, so we should not expect 'the government' as a whole to make any firm and lasting decision in respect of the industry as a whole.

However, inaction or indecision on the part of the authorities, like refusal to recognize the problem in the first place, or eagerness to abnegate responsibility for dealing with it, can better be understood when the problem turns out to be an insoluble riddle. The problem is that rural villagers want 'development', and they would like to experience economic development without the loss of social harmony. The militant Panguna landowners seem to have experienced a loss of social harmony and a relationship of economic dependency as a result of the compensation package accepted by their own predecessors. But there is no obvious way of marshalling community support without a compensation package; concessions to landowners can only take the form of increased material benefits, while the recipients, and even their successors, may not become aware of the negative social impact of these 'benefits' until it is too late - if then. The package is essential to the project, the package is a time bomb, but new compensation packages can and have to be negotiated for new projects, if there *are* any new projects, now that the first time bomb has gone off.

#### NOTES

An earlier and shorter version of this paper was presented to a seminar on 'The North Solomons situation: issues and options', held at the University of Papua New Guinea, 8-9 September 1989. I should like to thank John Burton, Jim Griffin, Phil Hughes,

Richard Jackson, Peter Larmour, Tim Omundsen, Tony Regan, Vincent Warakai, Martin Ward and Michael Young for their comments on an earlier draft.

- <sup>1</sup> One or both of these arguments recur in many of the publications dealing with the development of Bougainvillean secessionism in the period 1966-74 (Crocombe 1968; Hannett 1969a, 1969b; Stent 1970; Fingleton 1970; Middlemiss 1970; Ogan 1971a, 1974; Momis and Ogan 1972; Griffin 1972, 1982; Dove et al. 1974; Mamak and Bedford 1974; Bedford and Mamak 1979). So far as the Nasioi are concerned, the best evidence in favour of the first argument is Ogan's (1972) report of fieldwork conducted in the period 1962-64, but the argument is not pursued in Oliver's (1973) history of Bougainville. The best evidence in favour of the second argument is to be found in Bedford and Mamak's (1977) account of relationships between the landowners, the mining company and the colonial administration from 1964 to 1974, but this account certainly plays down the significance of internal political divisions within the landowning community (Ogan 1971a, 1974, 1985; Mamak and Bedford 1974; Griffin 1982). These are not the only arguments which have been put forward in explanation of the original secessionist movement (see Hannett 1969a; Hastings 1976; Griffin 1976), but they have certainly outlasted the others, and both have been resurrected in the context of the present crisis (see Ketsimur, Griffin, Ogan, Grynberg, Toro, and Priests of Bougainville Diocese, all 1989).
- <sup>2</sup> Aside from the real or imagined grievances of local landowners and other ordinary Bougainvilleans, the story has retained its mythical significance because it serves to explain or justify both the institutions of provincial and community government (Conyers 1976; Connell 1977; Griffin 1982) and the formation of the national government's mineral development policy (Zorn and Bayne 1975; Mikesell 1975; O'Faircheallaigh 1984a).
- <sup>3</sup> In the context of the present crisis, this story has been revived in the form of an argument regarding the respective roles of Sir Julius Chan, then Prime Minister, Father John Momis, then (as now) Minister for Provincial Affairs, and Mr Leo Hannett, then Premier of North Solomons Province (see Hannett 1989; Momis 1989).
- <sup>4</sup> In view of the prospect of a large-scale gold mine on Lihir Island, in his own (Namatanai) constituency, Sir Julius is said to have told the islanders that they were living in a 'sociological time-bomb', and 'potentially a worse "time-bomb" than Bougainville' (*Post-Courier*, 4 August 1986).
- <sup>5</sup> Despite the enormous volume of literature on nationalism, micronationalism, regionalism, tribalism, and parochialism in Papua New Guinea, I am not aware of any systematic study of the relative significance of physical criteria (for example, skin colour) and cultural criteria (for example, tribal fighting) in the ethnic perceptions of Papua New Guineans. But it is clear from everyday observation that there is a very great *range* of criteria involved. Aside from the secessionist literature previously cited, Imbun (1989) has provided some interesting insights into the complexity of the ethnic relationships prevailing amongst Papua New Guineans in the Arawa-Panguna area at the start of the current crisis.
- <sup>6</sup> Hannett (1969a) argued for the existence of a traditional 'culture area' which embraced the black-skinned peoples of Bougainville and the Western Solomon Islands, but it is difficult to demonstrate such arguments from the ethnographic evidence. Oliver (1973) manages to construct a number of generalizations about 'Bougainvillean culture', but he does not claim that they are exclusively true of Bougainville (or the Solomon Islands), and they are largely based on his own (1955) observations of Siwai society.

<sup>7</sup> See May 1982 and references therein. The literature on local protest movements (including 'cargo cults') in the late colonial period is immense, but there are clearly high-level regional variations in timing and content.

<sup>8</sup> My own argument would be that Bougainvillean nationalism has always been a hybrid phenomenon. Crocombe (1968) says that the idea of secession was being actively discussed by educated Bougainvilleans before the viability of the mining project was established; Ogan (1972,1974) says that sections of the Nasioi language group (Catholics rather than Protestants) exhibited a 'cargoistic' mentality in the same period; and Bedford and Mamak (1977) have documented the violent confrontations which then took place between villagers, geologists and government officers (mainly in Guava Census Division), while Paul Lapun was trying to amend the Mining Ordinance in the House of Assembly. These were amongst the ingredients of Bougainvillean nationalism, but the development of the mining project after the grant of the Special Mining Lease (in April 1969) is what mixed them all together.

<sup>9</sup> Angry landowners looted the Panguna supermarket in July 1979. Mining operations were halted for a few days in September 1981 when landowners erected a roadblock on the Arawa-Panguna road to demonstrate their support for renegotiation of the 1974 mining agreement.

<sup>10</sup> This at least was the apparent motivation of the strike (*Post-Courier*, 29 February and 4 March 1988) although the landowners had a number of other long-standing grievances (see Hyndman 1987; Bickerton 1988).

11 Evidence of the views held by the new Panguna Landowners' Association leadership in the months preceding the wave of sabotage in November-December 1988 is obviously crucial to the argument presented here, but is now liable to be obscured by subsequent public debate over the development of the crisis itself. My own sources are threefold. Firstly, I sent a team of University of Papua New Guinea students to investigate landowner-company relationships in April 1988 (see Okole 1989), shortly after the new Panguna Landowners' Association leadership had organized a demonstration in support of their demands, and I have since had access to a number of documents which relate to the negotiations which took place at that time. Secondly, I was able to attend a meeting held in New Dapera village on 2 November 1988, at which leaders of the new Panguna Landowners' Association (including Francis Ona, Philip Miriori and Cecilia Gemel) addressed a visiting delegation of landowners from Lihir Island, and subsequently conducted my own interviews with Messrs Ona and Miriori. And thirdly, I have referred to the record (almost a transcript) of another meeting, held in Guava village on 16 November 1988, at which leaders of the new Panguna Landowners' Association (including Perpetua Serero, Philip Miriori and Cecilia Gemel) addressed the team of consultants which had been engaged (by the Department of Minerals and Energy) to investigate the landowners' grievances. This record appears as Appendix II of the report produced by these consultants (Applied Geology Associates 1989), and I can vouch for the fact that the views which it contains are very similar to those expressed at the previous meeting in New Dapera. Francis Ona had a good deal to say about the 'white mafia' at the New Dapera meeting; the record of the Guava meeting contains six hostile statements about 'whites' and a comparable number of complaints about Bougainvilleans who have supposedly sold out to the mining company, including landowners, politicians, and those BCL staff described as 'the black men in top offices', but there is only one statement which specifically targets other Papua New Guineans - the complaint that 'most [small BCL] contracts are owned by redskins who also cause social problems'. Apart from criticisms of the national government, I have found no evidence of anti-'redskin' sentiment or mention of secession in any of the documents produced by or about

the new Panguna Landowners' Association leadership in the period from March to May 1988.

<sup>12</sup> For this and subsequent references to the National Goals and Directive Principles (the Preamble to the National Constitution), see Brunton and Colqhoun-Kerr 1984:1-24. The 'myth of Melanesian communism' is expounded in a wide range of writings by members of the national political élite, most notably by the present Minister of Justice, Bernard Narokobi (1980,1983,1989). While Narokobi is a member of the Melanesian Alliance Party, like John Momis and (formerly) John Kaputin, who were leading members of the Constitutional Planning Committee (Deklin 1989), his own philosophy cannot be narrowly described as the ideology of this particular party.

13 The analysis which follows is part of a longstanding tradition in the anthropological analysis of social change in rural Melanesia which emphasizes the element of instability and even conflict which occurs in the political life of village communities, as leaders, factions and generations make different decisions about the best way to achieve 'development' or the good life. This might be described as 'road theory', because it pays particular attention to the way that village people (at least in New Guinea) talk about these decisions as choices between 'roads' - as in rot bilong kastom, rot bilong kaunsil, rot bilong bisnis, or rot bilong kago. In the Bougainvillean context, Ogan's writings are probably the best example of this sort of analysis.

14 The national Department of Lands (including the Land Titles Commission) administers a standard bureaucratic process for the registration and lease of customary land, including land required for mining projects. This cumbersome process has not changed in any significant detail since the colonial period - much to the annoyance and frustration of many would-be developers (Moi et al. 1983; James 1985). Mining companies have no option but to follow the requirements of this process.

<sup>15</sup> This argument is advanced at some length in Filer and Jackson 1989:chs 4 and 10. Application of this argument to customary land tenure in southern Bougainville is hindered by the lack of published evidence (see Burton 1989), which is restricted to Ogan's anecdotal paper on the Nasioi (1971b) and sections of Oliver's (1955) and Mitchell's (1976) books on the Siwai and Nagovisi respectively.

<sup>16</sup> In a document produced in March 1988 (signed Francis Ona, Perpetua Serero, Damien Damen) it is stated that 'members of land owners association were not [sic] been aware of the contents of the Land Title Agreement' and 'there has never been a proper survey done on every piece of leased land within the [1980?] Mining Lease Agreement.' In a simultaneous petition to the company and the government, the new Panguna Landowners' Association claimed that 'the Land Title Agreement object [is inconsistent with?] the customary laws [of land tenure?]'. In a letter to the BCL managing director (5 May 1989), Serero and Ona asked 'husat tru i bin go pas long katim mining lease boundary insait long of ground bilong mipela? Of papa bilong ground or yu company yet?' (Who took the lead in demarcating the mining lease boundary on our ground? The landowners or you the company?) The company's response, not surprisingly, was that 'any queries, disputes or complaints about land ownership within all mine lease areas should be referred to the Land Titles Commission. The Commission is the authority that determined and registered the land blocks, title holders and areas in terms of hectares ... Individual landowners were aware and involved with the Land Titles Commission in determining land ownership.' (The same could be said of all subsequent mining projects in Papua New Guinea.) But at the Guava village meeting (16 November 1988), the new Panguna Landowners' Association leadership was still saying that 'there must be a new land review; there are too many disputes over overlapping ownership, since the surveyors <sup>17</sup> At the Guava village meeting (16 November 1988): 'The original agreement over-rode our customs, denied us our land rights and was too rushed. It contradicts our way of life: what comes from the land should benefit the landowners. Only land title holders (850 of them) gain the benefits. Nobody else ... There are only five beneficiaries in Guava; we're only secondary beneficiaries. When the money is distributed from occupation fees and royalties the share is not enough for any of us, since there are two clans in Guava and one has more than a hundred people. Its not our job to settle these distribution issues.' My students also reported complaints about the problem of distribution (Okole 1989).

<sup>18</sup> Again at the Guava village meeting (16 November 1988): 'The Company has created classes in our society, where there were none before the Company came. Family

disputes have now occurred over land, even within families and within villages.'

19 The twelve were: Michael Pariu, Gregory Kopa, John Arevoka, Wendelinus Bitanuma, Kareoto Tonna, Michael Totombu, Steven Tampura, Mathew Kove, Denis Onana, Nelson Operi, Ienu Dapoi, and Peter Nandopa. Michael Pariu was the original organizer of the 'old' Panguna Landowners' Association. Mathew Kove was the Guava village representative. Wendelinus Bitanuma seems at some stage to have 'defected' to the new Panguna Landowners' Association.

<sup>20</sup> At the Guava village meeting (16 November 1988): 'We see no evidence of the operations of the Trust Fund, except that it benefits a very small group of people. Mathew Kove and Severinus Ampaoi were the people who gave our land away. They are doing the same with the Trust Fund. It's just a cover-up to keep us all quiet. [Paul] Ouodling [former managing director of BCL] fooled the old men. We were all happy when it started. Now we have tried to change the leaders at the AGMs, but the only way we can do it is when they leave in coffins.' Severinus Ampaoi was head of BCL's Village Relations Office at the time of the 1980 compensation agreement. In 1988 he was chairman of the Trust Fund and also on the boards of the nationally-owned Bougainville Development Corporation and BCL's own 'trust fund', the Bougainville Copper Foundation. The question of whether the Trust Fund was or was not 'mismanaged' under his chairmanship is a complex one, which has been the subject of extensive litigation since the new Panguna Landowners' Association leaders broke into the Trust Fund offices in August 1988 (see Applied Geology Associates 1989:7.11-15; Michael 1989). Nor should it be imagined that Mr Ampaoi is the only local capitalist to have attracted the wrath of the militants.

<sup>21</sup> Although Nash (1974) has argued that the matrilineal principle was alive and well in Nagovisi society during the period of her fieldwork (1969-70), when cash-cropping was already well established, other studies in the New Guinea Islands region have indicated that Nagovisi may be a special case (see Jessep 1987 and references therein). There is no published evidence on the subsequent impact of the mining project on the Nagovisi recipients. My own observations suggest that the matrilineal principle is already in decline amongst the would-be titleholders of the Lihir project, although no mining agreement has yet been signed.

 $^{22}$  At the Guava village meeting (16 November 1988): 'BCL must pay all the landowners since our land is almost finished ... They must put the land back to its original state,

but it's too late.'

23 References to the decline of matrilineal inheritance have largely been implicit in the statements of the new Panguna Landowners' Association leadership (as in previous quotations from the record of the Guava village meeting), but there is no more eloquent statement of this problem than the abduction and possible assassination of Mathew Kove, the maternal uncle of Francis Ona and Perpetua Serero, in January 1989. It is

Perpetua Serero seems to have denied all knowledge on her deathbed (*Times of Papua New Guinea*, 15 June 1989). The problem of matrilineal inheritance, at least in Guava village, has all the elements of a Greek tragedy.

<sup>24</sup> There is a substantial body of ethnographic literature devoted to the relationship between 'traditional' and modern forms of material inequality in Melanesian village communities (see the review by Morauta 1984), and which thus has a bearing on my very summary discussion of the problems of distribution, inheritance and stratification in the Panguna context. This discussion is *not* meant to imply that 'traditional society' in Southern Bougainville was a society of equals (see Oliver 1971).

25 The new Panguna Landowners' Association leadership regards the 1979 Panguna supermarket riot as the first political act of the third generation. According to a contemporary newspaper account (*Post-Courier*, 12 July 1979): 'A mob of 300 to 400 young Bougainvilleans caused K200,000 damage when they ransacked and looted the Panguna supermarket yesterday. The incident occurred while village and community government leaders were meeting with executives of BCL to discuss land occupation fees. The supermarket, set up by the Bougainville Development Foundation [now the Bougainville Copper Foundation], feeds all its profits into community development ... While [they were] negotiating with BCL, a new lot of leaders arose from the crowd and marched on the supermarket [my italics].' The story goes on to describe the looting process, which was interrupted by the arrival of a squad of about forty policemen, who made seven arrests. It is somewhat ironic that the Supermarket Seven were bailed out that same day by BCL staff.

<sup>26</sup> The full quotation (from the record of the Guava village meeting) is: 'Mining causes mental illness and asthma.' Perpetua Serero died of an asthma attack on 14 June 1989. I have heard Francis Ona expound the brain damage theory. The Applied Geology Associates report documents the local view that environmental pollution has had a negative effect on people's physical *and* mental health (Applied Geology Associates 1989:4.27-36).

27 This included the commissioning of the Applied Geology Associates report itself. The consultants could not establish any physical link between mining operations and the health status of the local population - a conclusion which was utterly unacceptable to the new Panguna Landowners' Association leaders. BCL's own staff have apparently confronted a blank wall in their attempts to disabuse local schoolchildren of the belief in this connection (Bob Cornelius, personal communication).

<sup>28</sup> Before the start of the bombing campaign, some of BCL's national staff subscribed to the theory that Serero and Ona really were insane, like the 'cargo cult' leader Damien Damen. The Applied Geology Associates report found that 'a significant proportion' of the landowners were suffering from a 'dependency' complex, which incidentally explained their tendency to hypochondria. In the context of a well-armed and well-organized uprising, these perspectives seem inadequate.

The petition presented to the company and the government (by Serero, Ona and Damen) on 11 March 1988, contained only the one demand: 'Land owners wish to stop the mine by stopping National Government and BCL from renewing the BCL Mining Agreement.' The ten billion kina demand seems to have been formulated after the company replied (on 24 March) to the original petition. The original objective has since been achieved.

<sup>30</sup> I do not wish to imply that other forms of capital investment in rural areas have no such effect. On the other hand, there clearly are certain respects in which large-scale mining projects have a greater local impact than do forestry or agribusiness projects.

<sup>31</sup> The 'package' is not formally a part of the Mining Development Contract concluded between the national government and the mining company, and may not be legally enforceable. The Porgera landowners made this unwelcome discovery when the Enga Liquor Licensing Commission flagrantly ignored one of the provisions in the 'memorandum of understanding' (*Post-Courier*, 13 July and 7 August 89).

<sup>32</sup> Amongst the commentaries which have so far been published on the Bougainville crisis, Grynberg's (1989) comes closest to combining both of these perspectives. Roman Grynberg was on the Prime Minister's staff until June 1989. He also held meetings with the new Panguna Landowners' Association leadership before the crisis broke. But, despite his grassroots sympathies, Grynberg's economic perspective damned him in the eyes of the new Panguna Landowners' Association as another member of the 'white mafia' who simply 'came and greased us, tried to buy us off and told us to buy shares'.

<sup>33</sup> These 'distributional aspects' of Papua New Guinea mineral policy (including the vexed question of whether the state or the landowners own the minerals in the first place) were widely discussed in the 1980s (Jackson 1984, 1989; O'Faircheallaigh 1984b; Tilton et al. 1986; Polume 1988; Grynberg 1988; Donigi 1988; Millett 1988a, 1988b). Especially important in the present context is the (1988) report of the Working Party established by the National Premiers' Council, to which the 'forum/package concept' was partly a response.

<sup>34</sup> The Panguna SEIS (Scott 1973) was commissioned by BCL (after the start of mining operations). Equivalent studies for the Ok Tedi project were commissioned by the Department of Finance (Jackson 1977) and then the Department of Minerals and Energy (Jackson et al. 1980). Those for Misima (Gerritsen and Macintyre 1986), Lihir (Filer and Jackson 1986, 1989), Porgera (Pacific Agribusiness 1987), Wapolu (Young 1987), and Hidden Valley (Jackson 1988a) were all produced under Department of Minerals and Energy co-ordination. The first of the studies commissioned under the new deal was for the controversial Mount Kare project (Jackson 1988b).

<sup>35</sup> This quotation is from the Terms of Reference for the original Lihir SEIS (Filer and Jackson 1986), but others have been very similar.

<sup>36</sup> The new arrangement actually tends to bring the mining industry into alignment with long-standing practice in the forestry sector. Environmental plans for logging projects have been notoriously weak in their analysis of social impacts, though it could be argued that all aspects of logging projects look shoddy next to the grandeurs of the mining industry.

<sup>37</sup> The first (and perhaps the last) of the 'baseline planning studies' was the one done for the (now dormant) Lakekamu gold project (Filer and Iamo 1989).

<sup>38</sup> Fr Momis made this accusation when he launched his 'Bougainville Initiative' to 'tame the BCL pig' in the run-up to the 1987 national elections (*Post-Courier*, 6 and 8 May 1987). It recurs in the previously cited record of the Guava village meeting of 16 November 1988, and was certainly a major theme of the new Panguna Landowners' Association leadership. Although some commentators have suggested that the 'Initiative' was partly responsible for the present crisis, this particular accusation has long been a commonplace in public discussion of the mining industry.

<sup>39</sup> For many years the government had a remarkably low profile in the area around the Panguna mine. To give but one example, the present head of BCL's Village Relations Office, Philip Mapah, was the last 'kiap' to be stationed in the area.

#### REFERENCES

# Applied Geology Associates Pty Ltd

1989 Environmental socio-economic public health review: Bougainville Copper Mine, Panguna. Wellington, New Zealand.

## Bedford, Richard and Mamak, Alexander.

1977 Compensating for development: the Bougainville case. Christchurch, New Zealand: Department of Geography, University of Canterbury (Bougainville Special Publication no.2).

1979 Bougainville Copper mineworkers' strike, 1975. In Alexander Mamak and Ahmed Ali (eds) *Race, class and rebellion in the South Pacific*, pp.76-85. Sydney: Allen & Unwin.

#### Bickerton, K.

1985 Perceptions and reality: cargoism and development in the Western Province. Wheaton, Illinois: Wheaton College.

1988 Mine shutdown was no surprise. Post-Courier, 10 March.

# Brunton, Brian and Colghoun-Kerr, Duncan.

1984 The annotated Constitution of Papua New Guinea. Waigani: University of Papua New Guinea Press.

## Burton, John

1989 The land tenure system of the Nasioi people: and the bare cupboard of sustained research in mining areas. Paper presented to the University of Papua New Guinea seminar on 'The North Solomons situation: issues and options', September 1989.

#### Connell, John (ed.)

1977 Local government councils in Bougainville. Christchurch, New Zealand: Department of Geography, University of Canterbury (Bougainville Special Publication no.3).

# Conyers, Diana

1976 The provincial government debate: central control versus local participation in Papua New Guinea. Boroko, Papua New Guinea: Institute of Applied Social and Economic Research (Monograph 2).

#### Crocombe, R.G.

1968 Bougainville: copper, CRA and secessionism. New Guinea 3(3):39-47.

#### Deklin, T.

1989 In search of a home-grown constitution: the constitutional development in Papua New Guinea between 1962 and 1975. In Sione Latukefu (ed.) Papua New Guinea: a century of colonial impact. Port Moresby: National Research Institute and University of Papua New Guinea Press.

#### Donigi, P.

1988 State or the people: who has the right to the nation's resources? *Times of Papua New Guinea*, 7 and 14 July.

Dove, J., Miriung, T. and Togolo, M.

1974 Mining bitterness. In Peter G. Sack (ed.) Problem of choice: land in Papua New Guinea's future, pp.181-189. Canberra: Australian National University Press.

# Filer, Colin S. and Jackson, Richard

- 1986 The social and economic impact of a gold mine on Lihir. Konedobu, Papua New Guinea: Lihir Liaison Committee.
- 1989 The social and economic impact of a gold mine on Lihir: revised and expanded (2 vols). Konedobu, Papua New Guinea: Lihir Liaison Committee.

## Filer, Colin S. and Iamo, W.

1989 Base-line planning study for the Lakekamu gold project. Konedobu, Papua New Guinea: Department of Minerals and Energy.

# Fingleton, W.

1970 Bougainville: a chronicle of just grievances. New Guinea 5(2):13-20.

## Gerritsen, Rolf and Macintyre, Martha

1986 Social impact study of the Misima gold mine (2 vols). Boroko, Papua New Guinea: Institute of Applied Social and Economic Research.

## Griffin, James

- 1972 Bougainville secession or just sentiment? Current Affairs Bulletin 48(9):259-280.
- 1976 Kieta, Honiara and Port Moresby: hidden but not unknown. New Guinea 10(4):43-50.
- Napidakoe Navitu. In R.J. May (ed.) Micronationalist movements in Papua New Guinea, pp.113-138. Canberra: Department of Political and Social Change (Monograph 1), Research School of Pacific Studies, The Australian National University.
- 1989 Bougainville a people apart. Times of Papua New Guinea, 6 April.

#### Grynberg, R.

- 1988 Mining and property rights. Times of Papua New Guinea, 5 May.
- 1989 'Let them eat tailings'. Post-Courier, 7 July.

## Hannett, Leo

- 1969a Down Kieta way: independence for Bougainville? New Guinea 4(1):8-14.
- 1969b Resuming Arawa: discrimination against the whites? New Guinea 4(2):72-74.
- 1989 My stand on the Bougainville crisis. Times of Papua New Guinea, 3 August.

# Hastings, Peter

1976 Bougainville and the Solomons: an inevitable union? *New Guinea* 10(3):33-41.

#### Hyndman, D.C.

1987 Mining, modernization, and movements of social protest in Papua New Guinea. Social Analysis 21(3):20-38.

## Imbun, B.

1989 'In Panguna we are brothers': the social life and consciousness of an urban Engan community (BA Hons sub-thesis). Waigani: Department of Anthropology and Sociology, University of Papua New Guinea.

## Jackson, Richard T.

1977 Kiunga development study: draft. Waigani: Department of Finance.

A progress report on the monitoring of Ok Tedi and some policy questions relating to mining in Papua New Guinea. In D. Gupta and S. Polume (eds) Economic policy issues and options in Papua New Guinea. Canberra: National Centre for Development Studies (Working Paper 41), Research School of Pacific Studies, The Australian National University.

1988a The social and economic impact of the Hidden Valley gold project. Konedobu, Papua New Guinea: Department of Minerals and Energy.

1988b Mount Kare colluvial gold project: socio-economic impact study. South Melbourne: Mount Kare Mining Pty Ltd.

1989 'Let them eat theory': is there any viable alternative to mining for the development of remote areas in Papua New Guinea? Paper presented to the Conference of the Institute of Australian Geographers, Adelaide.

# Jackson, Richard T., Emerson, C.A. and Welsch, R.

1980 The impact of the Ok Tedi project. Konedobu, Papua New Guinea: Department of Minerals and Energy.

# James, R.W.

1985 Land law and policy in Papua New Guinea. Boroko, Papua New Guinea: Law Reform Commission (Monograph 5).

#### Jessep, O.

1987 Pigs, children and land among the Barok of New Ireland. Waigani: Land Studies Centre (Occasional Paper 87/1), University of Papua New Guinea.

# Ketsimur, C.

1989 Panguna: who's really to blame? Post-Courier, 20 February.

#### Mamak, Alexander and Bedford, Richard

1974 Bougainvillean nationalism: aspects of unity and discord. Christchurch, New Zealand: Department of Geography, University of Canterbury (Bougainville Special Publication no.1).

# May, R.J. (ed.)

1982 Micronationalist movements in Papua New Guinea. Canberra: Department of Social and Political Change (Monograph 1), Research School of Pacific Studies, The Australian National University.

#### Michael, G.

1989 Assessment of the controversial RMTL Trust Fund. Unpublished fieldwork report. Middlemiss, B.J.A.

1970 Napidakoe Navitu. In Marion W. Ward (ed.) *The politics of Melanesia:* papers delivered at the 4th Waigani Seminar, pp.100-104. Canberra: Research School of Pacific Studies, The Australian National University, and The University of Papua New Guinea, Port Moresby.

Mikesell, R.F.

1975 Foreign investment in copper mining: case studies of mines in Peru and Papua New Guinea. Baltimore: Johns Hopkins University Press.

Millett, J.

1988a Minerals and the landowner. Post-Courier, 26 August.

1988b Are some provinces more equal than others? Post-Courier, 21 October.

Mitchell, D.D.

1976 Land and agriculture in Nagovisi, Papua New Guinea. Boroko, Papua New Guinea: Institute of Applied Social and Economic Research (Monograph 3).

Moi, K. et al.

1983 Report of the Task Force on Customary Land Issues: presented to the Minister for Lands, April 1983. Port Moresby.

Momis, J.

1989 Bougainville - causes and solutions. Post-Courier, 27 September.

Momis, J. and Ogan, E.

1972 A view from Bougainville. In Marion W.Ward (ed.) Change and development in rural Melanesia: papers delivered at the 5th Waigani Seminar, 1971, pp.106-118. Canberra: Research School of Pacific Studies, The Australian National University, and The University of Papua New Guinea, Port Moresby.

Morauta, Louise

1984 Social stratification in lowland Papua New Guinea: issues and questions. In R.J. May (ed.) Social stratification in Papua New Guinea. Canberra: Department of Political and Social Change (Working Paper 5), Research School of Pacific Studies, The Australian National University.

Narokobi, B.

1980 The Melanesian way. Boroko, Papua New Guinea: Institute of Papua New Guinea Studies.

1983 Life and leadership in Melanesia. Suva: University of Papua New Guinea and Institute of Pacific Studies, University of the South Pacific.

1989 Lo bilong yumi yet: law and custom in Melanesia. Suva: Melanesian Institute for Pastoral and Socio-Economic Service and University of the South Pacific.

Nash, Jill

1974 Matriliny and modernization: the Nagovisi of South Bougainville (New Guinea Research Bulletin 55). Canberra: Australian National University Press. O'Faircheallaigh, C.

1984a Mining and development: foreign-financed mines in Australia, Ireland, Papua New Guinea and Zambia. London: Croom Helm.

1984b Review of Papua New Guinea's mineral policy 1964-82: some preliminary findings. In D.Gupta and S.Polume (eds) *Economic policy issues and options in Papua New Guinea*. Canberra: National Centre for Development Studies (Working Paper 41), Research School of Pacific Studies, The Australian National University.

# Ogan, Eugene

- 1971a Charisma and race. In A.L. Epstein, R.S. Parker and Marie Reay (eds) The politics of dependence: Papua New Guinea 1968, pp.132-161. Canberra: Australian National University Press.
- 1971b Nasioi land tenure: an extended case study. Oceania 42(2):81-93.
- 1972 Business and cargo: socio-economic change among the Nasioi of Bougainville (New Guinea Research Bulletin 44). Canberra: Australian National University Press.
- 1974 Cargoism and politics in Bougainville 1962-1972. *Journal of Pacific History* 9:117-129.
- 1985 Participant observation and participant history in Bougainville. In Deborah Gewertz and Edward L.Schieffelin (eds) *History and ethnohistory in Papua New Guinea* (Oceania Monograph 28), pp.127-144. Sydney: University of Sydney.
- 1989 Plans to aid Papua New Guinea favour wealthy, not underdogs. *Times of Papua New Guinea*, 6 July.

#### Okole, H.

1989 The Panguna landowners' organisations. Paper presented to the University of Papua New Guinea seminar on 'The North Solomons situation: issues and options', September 1989.

## Oliver, Douglas

- 1955 A Solomon Island society: kinship and leadership among the Siuai of Bougainville. Cambridge, Mass.: Harvard University Press.
- 1971 Southern Bougainville. In Ronald M. Berndt and Peter Lawrence (eds) Politics in New Guinea, pp.276-297. Nedlands: University of Western Australia Press.
- 1973 Bougainville: a personal history. Melbourne: Melbourne University Press.

#### Papua New Guinea National Premiers Council

1988 Report of the Mining and Petroleum Working Committee. Unpublished.

#### Pacific Agribusiness Ptv Ltd

1987 Social and economic impact study: Porgera gold mine (2 vols). South Melbourne.

# Pintz, William S.

1984 Ok Tedi: evolution of a Third World mining project. London: Mining Journal Books.

Polume, Samson

Mineral resources and the ethics of development. In Philip J. Hughes and Charmian Thirlwall (eds) *The ethics of development: choices in development planning* (vol 4 of Papers from the 17th Waigani Seminar, 1986), pp.204-221. Port Moresby: University of Papua New Guinea Press.

Priests of Bougainville Diocese

1989 The Bougainville crisis: a church perspective. *Post-Courier*, 24 and 28 August.

Scott, W.D. & Co.

1973 A study of the impact of the Bougainville Copper Project on the economy and society of Papua New Guinea. Sydney.

Senge, F.

1989a A minister goes missing in action. Post-Courier, 29 March.

1989b PM must look for answers at Waigani. Post-Courier, 19 May.

Siaguru, T.

1988 Bougainville: symptoms of a wider disorder. *Post-Courier*, 9 December.

1989 Bougainville: it's time for the leaders to take the lead. *Post-Courier*, 26 May.

Stent, W.R.

1970 Bougainville: what is truth? New Guinea 5(2):6-12.

Tilton, J., Millett, J. and Ward, R.

1986 Mineral and mining policy in Papua New Guinea. Port Moresby: Institute of National Affairs (Discussion Paper 24).

Toro, A.

1989 Bougainville: the view from the grassroots. *Post-Courier*, 28 July.

Young, Michael W.

1987 Wapolu gold mining project: a socio-economic impact study. Canberra: Anutech Pty Ltd.

Zorn, Jean G. and Bayne, Peter (eds)

1975 Foreign investment, international law and national development: papers presented at the 7th Waigani Seminar, 1973. Sydney: Butterworths.